

## ABSTRACT OF THE DISCLOSURE

A servo controller includes a mechanical characteristic compensation unit for attenuating components having predetermined frequencies and corresponding to characteristics of a machine, which are included in a position instruction signal corrected by an FIR filter, so as to compute feed-forward signals respectively associated with the position, speed and torque of the machine, and a feedback compensation unit for driving the machine according to the feed-forward signals. Therefore, the servo controller can reduce vibrations that originate from the characteristics of the machine 2. In addition, because the FIR filter can easily make the response path with respect to a symmetric instructed path become symmetric, and, when the machine is made to travel between two positions along the same path, can make the two response paths of the round trip match each other, machined surfaces having no irregularities can be provided when performing reciprocating machining.